



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/536,258	03/27/2000	Gary L. Gastineau	11657-003001	3646

22930 7590 06/29/2004

HOWREY SIMON ARNOLD & WHITE LLP
BOX 34
1299 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

EXAMINER

CHARLES, DEBRA F

ART UNIT PAPER NUMBER

3628

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/536,258

Applicant(s)

GASTINEAU ET AL.

Examiner

Debra F. Charles

Art Unit

3628

llw

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on January 05, 09 and 28, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. Claims 1-20 have been amended in the communication from the attorney received January 9, 2004.

Response to Arguments

3. Applicant's arguments with respect to claims 4 and 11 have been considered but are moot in view of the new ground(s) of rejection. The 101 rejection is maintained because the invention does not make non-trivial use of computers. Pilipovic does make up for the deficiencies in Kiron because the parameters underlying the econometric model, when input within the model, effectively reflect the sensitivities of the characteristics of the portfolio's interday returns of the inventor's mirrored portfolio that projects the expected return of the original portfolio. Thus, the motivation is the individual parameters, when placed into the econometric model with the various econometric weights, reflect the sensitivities and forward price volatilities of the original portfolio to effectuate the projected return of the original portfolio, aiding decision-making.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Art Unit: 3628

Ciaims 1-4,6,7 and 20 are rejected under 35 U.S.C. 101 because the bodies of the claims do not recite technology, i.e. computer implementation or any other technology in a non-trivial manner. *In re Toma*, 197 USPQ 852 (CCPA 1978). *Ex parte Bowman* 61 USPQ2D 1669.

For a claim to be statutory under 35 USC 101 the following two conditions must be met:

1) The claimed invention must produce a "useful, concrete, tangible result" (*In re Alappat*, 31USPQ2d 1545, 1558 (Fed. Cir. 1994) and *State Street vs. Financial Signature Group Inc.*, 47 USPQ2d 1596' 1601-02 (Fed Cir. 1998));

AND

2) The claimed invention must utilize technology in a non-trivial manner (*Ex parte Bowman*, 61 USPQ2d 1665, 1671 (Bd. Pat. Pat. App. & Inter. 2001)).

As to the technology requirement, note MPEP 2106 IV B 2(b). Also note *In re Waldbaum*, 173USPQ 430 (CCPA 1972) which teaches "useful arts" is synonymous with "technological arts". In *Musgrave*, 167USPQ 280 (CCPA 1970), *In re Johnston*, 183USPQ 172 (CCPA 1974), and *In re Toma*, 197USPQ 852 (CCPA 1978), all teach a technological requirement.

In *State Street*, "in the technological arts" was never an issue. The invention in the body of the claim must recite technology. If the invention in the body of the claim is not tied to technological art, environment, or machine, the claim is not statutory. *Ex parte Bowman* 61USPQ2d 1665,1671 (BD. Pat. App. & Inter.2001)(Unpublished).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3,6-7,8-10 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiron et al. (U.S. PAT. 5806048A) and Pilipovic (U.S. PAT. 6456982B1).

Re claims 1 and 8: Kiron et al. disclose a method of hedging investment risk in actively managed exchange traded fund,(col. 1, lines 40-55 and col. 2, lines 1-20, col. 3, lines 1-10), comprising:

selecting a portfolio of financial instruments(col. 3, lines 1-10, col. 4, lines 5-35).

Kiron et al. disclose(s) the claimed invention except receiving or determining factor information about the fund holdings, wherein the factor information measures the sensitivity of the fund holdings to factors that affect the value of the fund holdings; and determined factors to produce a hedging portfolio with substantially the same sensitivity to the factors that affect the value of the fund holdings, wherein at least part of the method is performed on a computer. However, in col. 7, lines 20-30, col. 8, lines 10-40 thereof, Pilipovic disclose(s) hedging and driver factors that determine price. It would be obvious to one of ordinary skill in the art to modify the invention of Kiron et al. based on the teachings of Pilipovic. The motivation to combine these references is Pilipovic's econometric model extracts relevant econometric parameters that influence the price of the hedging strategy.

Re claims 2 and 9: Kiron et al. disclose wherein the hedging portfolio tracks the price of the fund(col. 3, lines 1-15).

Art Unit: 3628

Re claims 3 and 10: Kiron et al. disclose using the hedging portfolio to hedge in the exchange traded fund(col. 7, lines 1-15).

Kiron et al. disclose(s) the claimed invention except to hedge a position taken.

However, in col. 2, lines 50-67, col. 21, lines 10-55 thereof, Pilipovic disclose(s) hedging a position. It would be obvious to one of ordinary skill in the art to modify the invention of Kiron et al. based on the teachings of Pilipovic. The motivation to combine these references is Pilipovic explicitly discusses hedging and Kiron et al. discusses using linked derivatives valuation techniques. Derivatives do function as hedges, however, Pilipovic provides explicit detail on hedging strategies.

Re claims 6 and 13: Kiron et al. disclose(s) the claimed invention except the factors include economic activity, inflation rates or other factors that are related to measures of economic activity. However, in col. 4, lines 20-40, col. 7, lines 15-45 thereof, Pilipovic disclose(s) multi-factor model for simulating, pricing and hedging financial products. It would be obvious to one of ordinary skill in the art to modify the invention of Kiron et al. based on the teachings of Pilipovic. The motivation to combine these references is the factors that are a part of Pilipovic's multifactor model present economic activity influenced by inflation rates. Pricing is influenced by inflation rates.

Re claims 7 and 14: Kiron et al. disclose(s) selecting a group of securities, and constructing the hedging portfolio based upon weightings and selections of securities from the group of securities(col. 3, lines 1-10, 45-63, col. 4, lines 5-10, col. 6, lines 1-10).

7. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiron et al. and Pilipovic as applied to claims 1 and 8 above, and further in view of Waclawski(U.S. 6377907 B1).

Re claims 4 and 11: Kiron et al. and Pilipovic disclose(s) the claimed invention except applying factor analysis to the portfolio of the exchange traded fund to determine the sensitivity of the fund to the factors. However, in Abstract, col. 2, lines 40-67, col. 3, lines 10-col. 4, line 36 thereof, Waclawski disclose(s) factor analysis used to establish pricing. It would be obvious to one of ordinary skill in the art to modify the invention of Kiron et al. and Pilipovic based on the teachings of Waclawski. The motivation to combine these references is Waclawski's factor analysis defines driving factors that define the price used to make buy, sell and hold.

8. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiron et al. and Pilipovic as applied to claims 3 and 11 above, and further in view of Meyers et al. (U.S. PAT. 5937159A).

Re claims 5 and 12: Kiron et al. and Pilipovic disclose(s) the claimed invention except the applying step occurs or the factor analysis is applied in a trusted computer system. However, in Abstract, cols. 1-26 thereof, Meyers et al. disclose(s) a trusted secure computer system. It would be obvious to one of ordinary skill in the art to modify the invention of Kiron et al. and Pilipovic based on the teachings of Meyers et al. The

Art Unit: 3628

motivation to combine these references is both Kiron et al. and Pilipovic easily fit onto trusted secure computer systems which are widely used for financial applications.

9. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiron et al., Pilipovic and Meyers et al.

Re claims 15-18: Kiron et al. disclose a computer system for producing a hedging portfolio for hedging investment risk in actively managed exchange traded funds(col. 1, lines 40-55 and col. 2, lines 1-20, col. 3, lines 1-10), comprising:

a computer storage medium storing a computer program product for determining the basket of instruments for hedging investment risk(col. 4, lines 35-55), comprising instructions for causing the computer to:

select a portfolio of financial instruments(col. 3, lines 1-10, col. 4, lines 5-35);

produce a hedging portfolio with substantially the same sensitivity to the factors that the factors that affect the value of the fund(col. 7, lines 1-15).

Re claim 15-18: Kiron et al. disclose(s) the claimed invention except receive or determine factor information about the fund holdings, wherein the factor information measures the sensitivity of the fund holdings to determine factors that affect the price of the exchange traded fund; and determined factors to produce a hedging portfolio that tracks the price of the fund, stocks to hedge a position taken, apply factor analysis to the exchange traded fund to determine the sensitivity of the fund holdings to the factors, the factors include economic

activity, inflation rates or other factors that are related to measures of economic activity. However, in col. 2, lines 50-67, col. 4, lines 20-55, col. 7, lines 20-30, col. 8, lines 20-40, col. 21, lines 10-55, thereof, Pilipovic disclose(s) hedging and driver factors that determine price, factor analysis used to establish pricing, hedging a position. It would be obvious to one of ordinary skill in the art to modify the invention of Kiron et al. based on the teachings of Pilipovic. The motivation to combine these references is Pilipovic's econometric model extracts relevant econometric parameters that influence the price of the hedging strategy.

Re claim 15: Kiron et al. and Pilipovic disclose(s) the claimed invention except a trusted computer system. However, in Abstract, cols. 1-26 thereof, Meyers et al. disclose(s) a trusted secure computer system. It would be obvious to one of ordinary skill in the art to modify the invention of Kiron et al. and Pilipovic based on the teachings of Meyers et al. The motivation to combine these references is both Kiron et al. and Pilipovic easily fit onto trusted secure computer systems which are widely used for financial applications.

Re claim 19: Kiron et al. disclose(s) construct the hedging portfolio based upon weightings and selections from the group of securities(col. 3, lines 1-10, 45-63, col. 4, lines 5-10, col. 6, lines 1-10).

Art Unit: 3628

10. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kiron et al. and Pilipovic.

Re claim 20: Kiron et al. disclose(s) a method of calculating a an intra-day value proxy(col. 2, line 55-col. 3, line 15, new linked derivative security functions as proxy) for an actively managed exchange traded fund, comprising:

Kiron et al. disclose(s) the claimed invention except producing a hedging portfolio to track by receiving or determining factor information about the fund holdings, wherein the factor information measures the sensitivity of the fund holdings to factors that affect the price of the fund with respect to the determined factors to produce the hedging portfolio. However, in col. 2, lines 50-67, col. 4, lines 20-55, col. 7, lines 20-30, col. 8, lines 20-40, col. 21, lines 10-55, thereof, Pilipovic disclose(s) hedging and driver factors that determine price, factor analysis used to establish pricing, hedging a position. It would be obvious to one of ordinary skill in the art to modify the invention of Kiron et al. based on the teachings of Pilipovic. The motivation to combine these references is Pilipovic's econometric model extracts relevant econometric parameters that influence the price of the hedging strategy.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra F. Charles whose telephone number is (703) 305-4718. The examiner can normally be reached on 9-5 Monday thru Friday.

Art Unit: 3628

if attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantzy Poinvil can be reached on (703) 305-9779. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Debra F. Charles
Examiner
Art Unit 3628



JEFFREY PWU
PRIMARY EXAMINER
